

Amendments to the Claims

Kindly cancel claim 18.

Kindly amend claims 1, 2, 4, 5, 10, 12, 14, 16 and 19-21.

Kindly add new claim 22.

1. (Currently amended) An electrodeposition coating composition comprising:
 - (i) a cationic or anionic resin and a cross-linking agent, and
 - (ii) an ester compound selected from the group consisting of:
 - (a) a diester compound of polyoxyalkylene glycol and aliphatic monocarboxylic acid,
 - (b) a diester compound of polyoxyalkylene alkyl ether monoalcohol and aliphatic dicarboxylic acid, and
 - (c) a polyester compound obtained by reaction of aliphatic glycol having 2 or 3 carbon atoms, aliphatic dicarboxylic acid and aliphatic monoalcohol.
2. (Currently amended) The electrodeposition coating composition as described in claim 1, wherein the polyoxyalkylene glycol in the diester compound (a) is selected from the group consisting of polyethylene glycol, polypropylene glycol and polybutylene glycol.
3. (Original) The electrodeposition coating composition as described in claim 1, wherein the polyoxyalkylene glycol in the diester compound (a) has a weight average molecular weight falling in a range of 150 to 1000.
4. (Currently amended) The electrodeposition coating composition as described in claim 1, wherein the aliphatic monocarboxylic acid in the diester compound (a) is aliphatic monocarboxylic acid having 6 to 10 carbon atoms, ~~particularly 8 carbon atoms.~~

5. (Currently amended) The electrodeposition coating composition as described in claim 4, wherein the aliphatic monocarboxylic acid is selected from the group consisting of hexanoic acid, heptanoic acid, caprylic acid, nonanoic acid, decanoic acid, 2-ethylhexenoic acid, isooctylic acid and neodecanoic acid.

6. (Original) The electrodeposition coating composition as described in claim 1, wherein the diester compound (a) has a weight average molecular weight falling in a range of 40 to 1200.

7. (Original) The electrodeposition coating composition as described in claim 1, wherein the polyoxyalkylene alkyl ether monoalcohol in the diester compound (b) has an alkylene group having 2 to 4 carbon atoms and an alkyl group having 4 to 8 carbon atoms.

8. (Original) The electrodeposition coating composition as described in claim 1, wherein the polyoxyalkylene alkyl ether monoalcohol in the diester compound (b) has a weight average molecular weight falling in a range of 100 to 500.

9. (Original) The electrodeposition coating composition as described in claim 1, wherein the aliphatic dicarboxylic acid in the diester compound (b) is aliphatic dicarboxylic acid having 4 to 8 carbon atoms.

10. (Currently amended) The electrodeposition coating composition as described in claim 9, wherein the aliphatic dicarboxylic acid is selected from the group consisting of succinic acid, glutaric acid, adipic acid, pimelic acid and suberic acid.

11. (Original) The electrodeposition coating composition as described in claim 1, wherein the diester compound (b) has a weight average molecular weight falling in a range of 300 to 1200.

12. (Currently amended) The electrodeposition coating composition as described in claim 1, wherein the aliphatic glycol in the diester compound (c) is selected from the group consisting of ethylene glycol, propylene glycol and 1,3-propanediol.

13. (Original) The electrodeposition coating composition as described in claim 1, wherein the aliphatic dicarboxylic acid in the diester compound (c) is aliphatic dicarboxylic acid having 4 to 8 carbon atoms.

14. (Currently amended) The electrodeposition coating composition as described in claim 13, wherein the aliphatic dicarboxylic acid is selected from the group consisting of succinic acid, glutaric acid, adipic acid, pimelic acid and suberic acid.

15. (Original) The electrodeposition coating composition as described in claim 1, wherein the aliphatic monoalcohol in the diester compound (c) is aliphatic monoalcohol having 4 to 13 carbon atoms.

16. (Currently amended) The electrodeposition coating composition as described in claim 1, wherein the aliphatic monoalcohol is selected from the group consisting of butyl alcohol, hexyl alcohol, octyl alcohol, 2-ethylhexyl alcohol, isononyl alcohol, tridecanol and tridecyl alcohol.

17. (Original) The electrodeposition coating composition as described in claim 1, wherein the diester compound (c) has a weight average molecular weight falling in a range of 300 to 2000.

18. (Cancel)

19. (Currently amended) The electrodeposition coating composition as described in claim 1, comprising the ester compound in a range of 0.5 to 20 parts by weight per 100 parts by weight of ~~the~~ resin solid matter of the electrodeposition coating composition.

20. (Currently amended) The electrodeposition coating composition as described in claim 1, comprising the ester compound in a range of 1 to 10 parts by weight per 100 parts by weight of ~~the~~ resin solid matter of the electrodeposition coating composition.

21. (Currently amended) An article coated with the electrodeposition coating composition as described in claim 1.

22. (New) The electrodeposition coating composition as described in claim 4, wherein the aliphatic monocarboxylic acid has 8 carbon atoms.

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, in response to the rejection of claims 1-21 under the first paragraph of 35 U.S.C. §112, claim 1 has been amended to require a cationic or anionic resin and a cross-linking agent, which corresponds to the subject matter of claim 18 (which has therefore been cancelled), and as disclosed at page 6, lines 21-25 and page 10, lines 6-12 of the specification.

As a result of this amendment, the rejection of claims 1-21 under the first paragraph of 35 U.S.C. §112 has been rendered moot.

In response to the rejection of claims 1, 5, 10, 12, 14, 16, 19 and 20 under the second paragraph of 35 U.S.C. §112, it being assumed that the Examiner meant to refer to claim 2 instead of claim 1 in this rejection, claims 2, 5, 10, 12, 14 and 16 have been amended to recite conventional Markush language, and claims 19 and 20 have been amended to delete “the” before “resin solid matter”, rendering the rejection moot.

Claim 4 could be considered improper because it includes a species (8 carbon atoms) as well as a genus (6 to 10 carbon atoms). Accordingly, this claim has been amended to delete the embodiment of 8 carbon atoms, as a result of which new claim 22 has been added to the application.

Claim 21 has been amended to insert a period at the end.

In view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

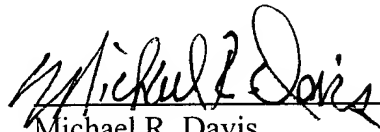
IDS and Claim of Priority

The Examiner is kindly reminded that Applicants filed an IDS and a Claim of Priority on September 2, 2003. Acknowledgment of these papers is requested, along with a copy of the Examiner-initialed PTO-1449 form.

Respectfully submitted,

Masaru SUGITA et al.

By:



Michael R. Davis

Registration No. 25,134

Attorney for Applicants

MRD/pth
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
September 30, 2003